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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/800,093	03/05/2001	Geoffrey B. Rhoads	P0323	3258

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DIGIMARC CORPORATION  
19801 SW 72ND AVENUE  
SUITE 100  
TUALATIN, OR 97062

EXAMINER

BLACKMAN, ANTHONY J

ART UNIT	PAPER NUMBER
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2676

DATE MAILED: 02/05/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/800,093

Applicant(s)

RHOADS, GEOFFREY B.

Examiner

ANTHONY J BLACKMAN

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 9-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Newly submitted claims 9-11 are elected to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims 9-11 are drawn to a method of steganographically embedding auxiliary data in imagery in first and second geolocation areas, classified in class 715, subclass 514. Claims 1-8 are directed to a method of compiling satellite imagery and generating a map through watermarking means, classified in class 382, subclass 100.

2. Newly submitted claims 12- 15 are elected to an invention that is independent or distinct from the invention originally claimed for the following reasons: claims 12-14 are drawn to a method of managing imagery, the imagery passing through at least a first system and being received at a second system drawn to class 713, subclass 176. Claims 1-8 are directed to a method of compiling satellite imagery and generating a map through watermarking means, classified in class 382, subclass 100.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 9-15 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

***Response to Arguments***

3. Examiner respectfully acknowledges applicant's utilization of MPEP 706.02(1)(1) because the secondary reference from the previous office action, at the time the instant application was made, owned by, or subject to an obligation of assignment to, Digimarc Corporation and vacates use of REED et al, US Patent No. 6,590,996 as a secondary reference. Examiner introduces WANG et al, US Patent No. 6,526,155 to better support the primary reference, NARAYANASWAMI et al, US Patent No. 6,504,571 to be explained below for claim 8.

Regarding claims 1 and 2, examiner interprets the primary reference, NARAYANASWAMI et al, to meet limitations as claimed for claim 1. Applicant's assertion that cited prior art "...at the cited passages stops short of, after map generation, watermarking the generated map (page 7, lines 1-2)", is respectfully disagreed with by examiner because the cited passages read upon claim limitations as recited. Further, column 8, lines 40-62 disclose map generation by system 200 via the image database 216, memory 108 and capturing device 100 in addition to the image annotation module 220 connecting the user-interface 202 and the image database creates and modifies the images and photos. The images and photos bear similar results to maps. Column 8, lines 6-19 disclose "...watermarking every captured image...". Therefore examiner maintains use of primary reference because the captured images, photos and maps are modified at least in association with watermarking every captured image. The individual images are watermarked and later reconstructed into a map or collage or photo album.

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Regarding claim 7, examiner respectfully disagrees with applicant's interpretation of VAN WIE et al, US Patent No. 5,943,422 as secondary reference and does not understand the amended claim language of claim 7., "...evidence processing...".

Examiner interprets the amended claim language to bear similar results to a watermarking "...degrading predictably..." (the deleted feature replaced by "...evidence processing...").

Therefore a 35 USC 112 second paragraph rejection will be applied to claim 7.

Accordingly, examiner will interpret claim 7 as best understood.

4. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Examiner does not understand the amended claim language of claim 7., "...evidence processing...". Examiner interprets the amended claim language to bear similar results to a watermarking "...degrading predictably..." (the deleted feature replaced by "...evidence processing...").

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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7. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by NARAYANASWAMI et al, US Patent No. 6,504,571.

As per claim 1, NARAYANASWAMI et al teach in a method of compiling satellite imagery (column 3, lines 6-50, column 4, lines 24-40 [at least inherent satellite imagery], column 8, lines 40-47, column 9, lines 33-40, column 10, lines 48-61, column 11, line 12-column 12, line 22 [at least inherent satellite imagery]) and generating a map (figure 3, elements 322, 324, 326, column 3, lines 6-50, col. 1, line 58-col 2, line 6, 59-col 3, line 50, col 4, lines 7-12, 32-40, col 8, line 63-col 9, line 13, col 10, lines 6-34, col 11, line 45-col 12, lines 22, 66-col 13, lines 10 and 56-62), an improvement comprising: watermarking image data (fig 1, elements 100 and 134, col 8, lines 6-21) acquired by a satellite (figure 3, elements 304, 306, 308, 312, 322, 324 and 326, col 2, line 59-col 3, line 50, col 4, line 14-41, col 10, line 48-61, col 11, line 12-col 12, line 22 [at least inherent satellite means]);

storing the watermarked image data in a database (figure 1, element 108, figure 2, elements 206, 208, 210, 212, 214, 216 218, figure 3, elements 304, 312, 322, col 8, lines 6-21, col 11, line 12-col 12, line 22); generating a map from the database (figure 3, elements 322, 324, 326, column 3, lines 6-50, col. 1, line 58-col 2, line 6, 59-col 3, line 50, col 4, lines 7-12, 32-40, col 8, line 63-col 9, line 13, col 10, lines 6-34, col 11, line 45-col 12, lines 22, 66-col 13, lines 10 and 56-62); and watermarking the map (it is inherent that as long as watermarking image data acquired by a satellite is performed that watermarking the map must also be performed , please see above).

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8. As per claim 2, NARAYANASWAMI et al meet limitations of claim 1, including in a method of generating a digital map from a database containing data from a plurality of aerial sources (column 3, lines 6-50, column 4, lines 24-40 [at least inherent satellite imagery], column 8, lines 40-47, column 9, lines 33-40, column 10, lines 48-61, column 11, line 12-column 12, line 22 [at least inherent satellite imagery]), an improvement comprising generating a digital map (figure 3, elements 322, 324, 326, column 3, lines 6-50, col. 1, line 58-col 2, line 6, 59-col 3, line 50, col 4, lines 7-12, 32-40, col 8, line 40-col 9, line 13, col 10, lines 6-34, col 11, line 45-col 12, lines 22, 66-col 13, lines 10 and 56-62); and then

watermarking the map (column 3, lines 6-50, column 4, lines 24-40 [at least inherent satellite imagery], column 8, lines 40-47, column 9, lines 33-40, column 10, lines 48-61, column 11, line 12-column 12, line 22 [at least inherent satellite imagery]).

9.. As per claim 3 NARAYANASWAMI et al meet limitations of claim 2 including in which the watermarking encodes, or points to, information that is also conveyed with said map in the form of header data (column 6, lines 49-54 and col 8, lines 6-21)

10. As per claim 4, NARAYANASWAMI et al meet limitations of claim 2, including in which the watermark permits later identification of the data sources used in generating the map (fig 1, elements 100 and 134, col 8, lines 6-21).

11. As per claim 5, NARAYANASWAMI et al meet limitations of claim 2, including in which the watermark comprises, or serves as a link to, an image identifier (the image identifier is equivalent to the parameters of col 8, lines 6-21).



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12. As per claim 6, NARAYANASWAMI et al meet limitations of claim 2, including in which the watermark comprises, or links to, data identifying at least one of the following: component used in forming said digital map, the date of digital map creation, an identifier corresponding to a person who created the digital map, an identifier corresponding to a person to whom the digital map was provided (identification of the photographer- see.col 6, lines 5-30-the underlined claim limitation is at least read upon by said reference).

***Claim Rejections - 35 USC § 103***

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over NARAYANASWAMI et al, US Patent No. 6,504,571 in view of VAN WIE et al, US Patent No. 5,943,422.

15. As per claim 7, NARAYANASWAMI et al meet limitations of claim 2, including a map processing means (figure 3, elements 322, 324, 326, column 3, lines 6-50, col. 1, line 58-col 2, line 6, 59-col 3, line 50, col 4, lines 7-12, 32-40, col 8, line 63-col 9, line

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13, col 10, lines 6-34, col 11, line 45-col 12, lines 22, 66-col 13, lines 10 and 56-62), however, does not expressly teach the following recited claim limitation regarding evidence processing, corresponding to map processing in the following manner, in which the watermark is designed to evidence processing, when the map is processed in a particular manner. VAN WIE et al suggests that the watermark is designed to evidence processing when the map is processed in a particular manner (col 2, lines 13-15, col 15, lines 22-47 and col 21, lines 52-67). It would have been obvious to one skilled in the art at the time of the invention to utilize the "Steganographic Techniques for Securely Delivering Electronic Digital Rights Management Control Information Over Insecure Communication Channels", in addition to "...provid[ing] compatibility with a Virtual Distribution Environment "(abstract, lines 11-12), in addition to electronically encoding contents in an image (figure 2) of VAN WIE et al with the system and methods for querying digital image archives containing digital photographs and/or videos ...indexed in accordance with a plurality of recorded parameters including time, date and geographic , location data... (abstract, lines 1-5), in addition to satellite imagery means (column 3, lines 6-50, column 4, lines 24-40 [at least inherent satellite imagery], column 8, lines 40-47, column 9, lines 33-40, column 10, lines 48-61, column 11, line 12-column 12, line 22 [at least inherent satellite imagery]) associated with watermarking processing (figure 1, element 134) and an image archive system (figure 2, col 4, lines 53-60) of NARAYANASWAMI et al because both inventions share similar technological environments related to the processing of data hiding techniques.

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16. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over NARAYANASWAMI et al, US Patent No. 6,504,571 in view of WANG et al, US Patent No. 6,526,155.

17. As per claim 8, NARAYANASWAMI et al disclose the means of a composite map formed from plural sets of component map data (figure 3, elements 322, 324, 326, column 3, lines 6-50, col. 1, line 58-col 2, line 6, 59-col 3, line 50, col 4, lines 7-12, 32-40, col 8, line 63-col 9, line 13, col 10, lines 6-34, col 11, line 45-col 12, lines 22, 66-col 13, lines 10 and 56-62), in addition to the means of watermarks encoding, or linking to meta data associated with its respective component map data (col 9, lines 33-40, col 10, lines 48-59, col 11, line 12-col 12, line 22), however, does not expressly teach that the means of a composite map formed from plural sets of component map data are each encoded with a different watermark, each of said different watermarks encoding, or linking to meta data associated with its respective component map data. WANG et al provides the suggestion that the means of a composite map formed from plural sets of component map data are each encoded with a different watermark (column 4, lines 4-10, 11-column 5, line 9) and the each of said different watermarks (column 4, lines 4-10, 11-column 5, line 9). It would have been obvious to one skilled in the art at the time of the invention to utilize the variable watermarking means of WANG et al with the system and methods for querying digital image archives containing digital photographs and/or videos ...indexed in accordance with a plurality of recorded parameters including time, date and geographic, location data... (abstract, lines 1-5), in addition to satellite imagery means (column 3, lines 6-50, column 4, lines 24-40 [at least inherent satellite

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imagery], column 8, lines 40-47, column 9, lines 33-40, column 10, lines 48-61, column 11, line 12-column 12, line 22 [at least inherent satellite imagery]) associated with watermarking processing (figure 1, element 134) and an image archive system (figure 2, col 4, lines 53-60) of NARAYANASWAMI et al because both inventions share similar technological environments related to the processing of variably placed watermarking signals (see NARAYANASWAMI et al column 4, lines 6-19 and see WANG et al column 4, line 60-column 5, line 9).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY J BLACKMAN whose telephone number is 703-305-0833. The examiner can normally be reached Monday through Friday between the hours of 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW BELLA can be reached on 703-308-6829. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

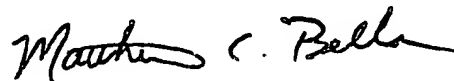
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ANTHONY J BLACKMAN  
Examiner  
Art Unit 2676

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